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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Georgui B. Chkodrov

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EXAMINER

NAHAR, QAMRUN

ART UNIT

PAPER NUMBER

2124

DATE MAILED: 07/21/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,973

Applicant(s)

CHKODROV ET AL.

Examiner

Qamrun Nahar

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-18 and 20-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-18, 20-31, 33 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the RCE filed on 5/28/04.
2. The objection to claim 32 is withdrawn in view of applicant's amendments.
3. The rejection under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement to claims 1-22 is withdrawn in view of applicant's amendments.
4. The rejection under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement to claims 1-22 is withdrawn in view of applicant's amendments.
5. The rejection under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention to claims 1-22 and 32 is withdrawn in view of applicant's amendments.
6. The rejection under 35 U.S.C. 102(b) as being anticipated by Davidson (U.S. 5,819,093) to claim 32 is withdrawn in view of applicant's amendments and remarks/arguments.
7. The rejection under 35 U.S.C. 102(b) as being anticipated by Davidson (U.S. 5,819,093) to claims 1-4, 7-12, 14-17, 20-26 and 29 is moot in view of the new ground(s) of rejection.
8. The rejection under 35 U.S.C. 103(a) as being unpatentable over Davidson (U.S. Pat. No. 5,819,093) to claims 5, 18, 27, 28, 30 and 31 is moot in view of the new ground(s) of rejection.
9. The rejection under 35 U.S.C. 103(a) as being unpatentable over Davidson (U.S. 5,819,093) in view of Gershman (U.S. 6,199,099) to claims 33-34 is moot in view of the new ground(s) of rejection.
10. Claims 1, 5, 15, 18, 23, 26, 32 and 33 have been amended.
11. Claims 6 and 19 have been canceled.
12. Claims 1-5, 7-18 and 20-34 are pending.

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13. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
14. Claims 1-4, 7-12, 14-17, 20-26 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Alverson (U.S. 6,480,818).
15. Claims 5, 18, 27, 28, 30, 31 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alverson (U.S. 6,480,818) in view of Erickson (U.S. 6,721,776).
16. Claim 32 is allowed.

Response to Amendment

Claim Rejections - 35 USC § 112

17. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

18. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites “for performing the method of claim 6” on line 2 of the claim.

However, claim 6 has been canceled. Therefore, claim 13 should be canceled. Due to the indefiniteness of claim 13, prior art could not be applied on the merits.

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20. Claims 1-4, 7-12, 14-17, 20-26 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Alverson (U.S. 6,480,818).

Per Claims 1 (Amended), 2-4 & 7:

Alverson teaches a method for debugging a program on a computer (abstract and column 7, lines 37-51) substantially as claimed comprising:

Loading a debugger into a thread of execution of the program being debugged; and running the debugger in the thread of execution being debugged to debug the program (column 9, lines 28-67 to column 10, lines 1-20; column 13, lines 28-67 to column 14, lines 1-38);

Calling a proxy interface via the debugger, located on a first computer, having a pointer to an object located on a second computer (column 11, lines 50-67)

Creating a socket (column 9, lines 28-44) for communicating with the debugger; and sending commands through the socket for conversion into function calls to the object interface (column 12, lines 1-17).

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Establishing communication with an external console; receiving a command from the console; and converting the command into a function call to object interface (column 12, lines 1-43).

Per Claims 8-12 & 14:

Alverson teaches a method for debugging a software program residing on a "computer-readable medium having stored thereon computer-executable instructions;" (Fig.1; column 8, lines 28-30).

Per Claims 15 (Amended), 16-17 and 26 (Amended):

Alverson further teaches:

Halting a thread of execution of the program being debugged, wherein the thread is associated with context data describing context of the thread (column 13, lines 28-39);

Obtaining and referencing pointer from context data to make a function call to an object from within the context of the thread being debugged (column 11, lines 50-67)

Establishing communication with an external console; receiving a command from the console; and converting the command into a function call to an object (column 12, lines 1-43);

Creating a socket for communicating within the thread (column 9, lines 28-44); and communicating with the console through the socket (column 12, lines 1-17);

including allowing other threads of execution of the program to continue (column 10, lines 30-42);

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Loading a debugger into the halted thread of execution of the program; and running the debugger in the halted thread of execution to debug the program (column 9, lines 28-67 to column 10, lines 1-20; column 13, lines 28-67 to column 14, lines 1-38).

Per Claims 20-22 & 29:

Alverson teaches a method for debugging a software program residing on a "computer-readable medium having stored thereon computer-executable instructions" (Fig. 1; column 8, lines 28-30).

Per Claim 23 (Amended):

This represent the system claim of the method disclosed in claims 1-4 and 7. It is rejected for the same reasons cited above, with the system disclosed as follows (abstract and column 7, lines 37-51), including "wherein the debugger converts the command into a function call to the object" (column 12, lines 1-43).

Per Claims 24 and 25:

Alverson teaches a system comprising a multiplexor module (column 11, lines 50-67) for multiplexing commands to a plurality of identified debugger modules (column 12, lines 1-43).

Alverson further teaches appropriate information exchange between said console and the plurality of debugger modules through the use of sockets (column 9, lines 28-44 and column 12, lines 3-8).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 5, 18, 27, 28, 30, 31 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alverson (U.S. 6,480,818) in view of Erickson (U.S. 6,721,776).

Per Claims 5 (Amended) and 18 (Amended):

The rejection of claims 2 and 15 are incorporated, respectively, and further, Alverson does not explicitly teach that the object is a COM object or a DCOM object. Erickson teaches that the object is a COM object or a DCOM object (column 3, lines 20-38).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Alverson to include that the object is a COM object or a DCOM object using the teaching of Erickson. The modification would be obvious because one of ordinary skill in the art would be motivated to allow software components and applications to communicate with each other in a standard and uniform way.

Per Claims 27 and 28:

The rejection of claim 26 is incorporated, and further, Alverson does not explicitly teach that the server on which the program resides is a web server, or that the program to be debugged is an electronic commerce program. Erickson teaches that the server on which the program

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resides is a web server and that the program to be debugged is an electronic commerce program (column 3, lines 20-38 and column 4, lines 4-17).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Alverson to include that the server on which the program resides is a web server and that the program to be debugged is an electronic commerce program using the teaching of Erickson. The modification would be obvious because one of ordinary skill in the art would be motivated to improve operating efficiency of a web-based electronic commerce application.

Per Claims 30 and 31:

Alverson further teaches a method for debugging a software program residing on a "computer-readable medium having stored thereon computer-executable instructions" (Fig. 1; column 8, lines 28-30).

Per Claim 33 (Amended):

This is another version of the claimed method discussed above (claims 26, 27 and 28), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above, including "an active server page (ASP) module" (Erickson, column 3, lines 20-38). Thus, accordingly, this claim is also obvious.

Per Claim 34:

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The rejection of claim 33 is incorporated, and Erickson further teaches accessing an object running on a browser by one of the consumers over the public network (column 4, lines 4-17).

Allowable Subject Matter

23. Claim 32 is allowed.

24. The following is a statement of reasons for the indication of allowable subject matter:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, halting a thread of execution of the program being debugged, wherein the thread is associated with context data describing context of the thread ... running the debugger in the thread of execution to debug the program, *the debugger calling objects from the context of the thread of the program* as recited in independent claim 32.

The closest cited prior arts, Davidson (U.S. 5,819,093) discloses a method for debugging a software program in a distributed environment as recited in claim 32. However, Davidson fails to teach halting a thread of execution of the program being debugged, wherein the thread is associated with context data describing context of the thread ... running the debugger in the thread of execution to debug the program, *the debugger calling objects from the context of the thread of the program* as recited in independent claim 32 and as pointed out by the applicant's remarks/arguments on pg. 11, par. 1 and 2.

Response to Arguments

25. Applicant's arguments with respect to claims 1-5, 7-18, 20-31, 33-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. Amended claim 15 is unclear as to who/what is doing the steps recited in the claim. That is, whether the steps recited is done by the debugger or the program. Furthermore, it is unclear as to whether the thread is resumed or not. It is suggested that claim 15 be amended further for clarification.

27. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (703) 305-7699. The examiner can normally be reached on Mondays through Thursdays from 9:00 AM to 6:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone number for the organization where this application or processing is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QN
July 13, 2004



RAVI KHATRI
PRIMARY EXAMINER